

In the claims

1. (Currently Amended) A system for policy-based management of a ~~multiprotocol~~ label switching ("~~MPLS~~") network, the system comprising:

a policy-based network administration system, the policy-based network administration system including a plurality of policies; and

the ~~MPLS~~ label switching network that is, ~~the MPLS network~~ coupled to the policy-based network administration system.

2. (Original) The system of claim 0, wherein the plurality of policies include a plurality of network operation policies.

3. (Original) The system of claim 2, wherein the plurality of network operation policies include a virtual private network policy.

4. (Original) The system of claim 2, wherein the plurality of network operation policies include a voice traffic policy.

5. (Original) The system of claim 2, wherein the plurality of network operation policies include a first quality of service policy and a second quality of service policy, the first quality of service policy being different from the second quality of service policy.

6. (Currently Amended) The system of claim 2, wherein:  
the policy-based management system includes a policy decision point; and  
the ~~MPLS~~ label switching network includes a policy enforcement point, the policy enforcement point being coupled to the policy decision point.

7. (Original) The system of claim 6, wherein the policy-based management system includes a policy repository, the policy repository coupled to the policy decision point.

8. (Original) The system of claim 7, wherein the policy-based management system includes a policy management console, the policy management console coupled to one or more of the policy decision point and the policy repository.

9. (Original) The system of claim 6, wherein the policy enforcement point is a label switch router.

10. (Original) The system of claim 9, wherein the label switch router is an edge label switch router.

11. (Original) The system of claim 10, wherein the edge label switch router is part of a label switched path.

12. (Currently Amended) A system for policy-based control of a ~~multi-protocol~~ label switching (“MPLS”) network carrying one or more of voice and data traffic, the system comprising:

a central office, the central office including a trunk gateway;

the MPLS label switching network, ~~the MPLS network~~ being coupled to the trunk gateway of the central office; and

a network administration system, the network administration system including a plurality of policies, each policy of at least a subset of the plurality of policies to control at least in part operation of the MPLS label switching network.

13. (Original) The system of claim 12, wherein the gateway is one of a line gateway, a trunk gateway, and a service gateway.

14. (Original) The system of claim 12, wherein the central office includes class five central office equipment.

15. (Original) The system of claim 12, wherein the network administration system includes one or more of traffic management information and device provisioning information.

16. (Original) The system of claim 12, wherein the plurality of policies include a plurality of traffic management policies.

17. (Currently Amended) The system of claim 12, further comprising a call control complex, the call control complex coupled to the network administration system and the MPLS label switching network.

18. (Original) The system of claim 17, wherein the call control complex is to send voice service traffic data to the network administration system.

19. (Currently Amended) The system of claim 18, wherein the network administration system is to send voice service label switched path provisioning policies to the MPLS label switching network.

20. (Currently Amended) The system of claim 18, wherein the network administration system is to send virtual private network provisioning policies to the MPLS label switching network.

21. (Currently Amended) The system of claim 17, wherein the label switching network is a multiprotocol label switching ("MPLS"), the system further comprising an SS7/AIN network coupled to the call control complex.

22. (Original) The system of claim 21, wherein the SS7/AIN network and the MPLS network are part of a regional telecommunications company network.

23. (Currently Amended) A method for policy-based control of a ~~multiprotocol~~ label switching ("MPLS") network, the method comprising:

storing a policy to control operation of at least a portion of the MPLS label switching network;

retrieving the policy in response to a control input;

sending the policy to the MPLS label switching network; and

operating the MPLS label switching network based at least in part on the policy.

24. (Original) The method of claim 23, wherein the policy is a network operation policy.

25. (Original) The method of claim 24, wherein the network operation policy is a voice traffic policy.

26. (Original) The method of claim 24, wherein the network operation policy is a virtual private network policy.

27. (Original) The method of claim 24, wherein the network operation policy is a quality of service policy.

28. (Currently Amended) The method of claim 23, wherein storing the policy to control operation of at least a portion of the ~~MPLS~~ label switching network includes storing the policy in a policy repository.

29. (Currently Amended) The method of claim 23, wherein the control input is received from a network device of the ~~MPLS~~ label switching network.

30. (Original) The method of claim 23, wherein the control input is received from a policy management console.

31. (Currently Amended) A method of operating a ~~multiprotocol~~ label switching network with policy-based management, the method comprising:

operating at least a portion of the ~~MPLS~~ label switching network based at least in part on a first policy;

receiving a control input;

selecting a second policy based at least in part on the control input, the second policy being different from the first policy; and

operating at least the portion of the ~~MPLS~~ label switching network based at least in part on the second policy.

32. (Currently Amended) The method of claim 31, wherein operating at least a portion of the ~~MPLS~~ label switching network based at least in part on a first policy includes operating at least a portion of the ~~MPLS~~ label switching network as one or more voice trunks based at least in part on a first voice traffic policy.

33. (Original) The method of claim 32, wherein receiving a control input includes receiving a voice traffic condition.

34. (Original) The method of claim 33, wherein the voice traffic condition is selected from the group consisting of time of day, measured voice traffic demand, estimated voice traffic demand, projected voice traffic demand, and a customer request.

35. (Currently Amended) The method of claim 32, wherein receiving the control input includes receiving network status information from a network device of the ~~MPLS~~ label switching network.

36. (Currently Amended) The method of claim 31, wherein operating at least a portion of the ~~MPLS~~ label switching network based at least in part on a first policy includes operating at least a portion of the ~~MPLS~~ label switching network as one or more virtual private networks based at least in part on a first virtual network policy.

37. (Currently Amended) A system for policy-based management of a ~~multiprotocol~~ label switching (~~“MPLS”~~)-network, the system comprising:  
the ~~MPLS~~ label switching network; and  
means for policy-based management of the ~~MPLS~~ label switching network, the means for policy-based management of the ~~MPLS~~ label switching network coupled to the ~~MPLS~~ label switching network.

38. (Currently Amended) The system of claim 37, wherein:  
the means for policy-based management of the ~~MPLS~~ label switching network includes a policy decision point; and  
the ~~MPLS~~ label switching network includes a policy enforcement point.

39. (Currently Amended) The system of claim 38, wherein the means for policy-based management of the ~~MPLS~~ label switching network includes a policy repository.

40. (Currently Amended) The system of claim 38, wherein the means for policy-based management of the ~~MPLS~~ label switching network includes one or more of a voice traffic policy, a virtual private network policy, and a quality of service policy.

41. (Currently Amended) A method for policy-based management of a ~~multiprotocol~~ label switching (“MPLS”)-network, the method comprising:

- a step for operating at least a portion of the ~~MPLS~~ label switching network based at least in part on a first policy;

- a step for receiving a control input;

- a step for selecting a second policy based at least in part on the control input, the second policy being different from the first policy; and

- a step for operating at least the portion of the ~~MPLS~~ label switching network based at least in part on the second policy.

42. (Original) The method of claim 41, wherein the first policy is selected from the group consisting of a voice traffic management policy, a virtual private network management policy, and a quality of service management policy.

43. (Currently Amended) A computer-readable medium storing a plurality of instructions to be executed by a processor for policy-based control of a ~~multiprotocol~~ label switching (“MPLS”)-network, the plurality of instructions comprising instructions to:

- store a policy to control operation of at least a portion of the ~~MPLS~~ label switching network;

- retrieve the policy in response to a control input; and

- send the policy to the ~~MPLS~~ label switching network; and

- ~~monitor operations of the MPLS network, the MPLS network operating based at least in part on the policy.~~

44. (Original) The computer-readable medium of claim 43, wherein the policy is selected from the group consisting of a voice traffic management policy, a virtual private network management policy, and a quality of service management policy.

45. (New) The computer-readable medium of claim 43, wherein the plurality of instructions further comprise instructions to monitor operations of the label switching network, the label switching network operating based at least in part on the policy.

46. (New) The computer-readable medium of claim 43 wherein the label switching network is a multiprotocol label switching (“MPLS”) network.

47. (New) The computer-readable medium of claim 43, wherein the plurality of instructions further comprise instructions for operating at least a portion of the label switching network based at least in part on a first policy by operating at least a portion of the label switching network as one or more voice trunks based at least in part on a first voice traffic policy.

48. (New) The computer-readable medium of claim 43, wherein the plurality of instructions further comprise instructions for operating at least a portion of the label switching network based at least in part on a first policy by operating at least a portion of the label switching network as one or more virtual private networks based at least in part on a first virtual network policy.

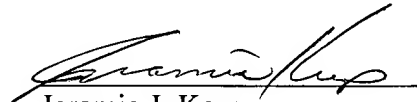
Conclusion

Claims 1-48 are pending, and claims 1, 6, 12, 17, 19, 21, 21, 23, 28, 29, 31, 32, 35-41, and 43 have been amended to broaden the scope beyond MPLS networks. New claims 45-48 have been added. Applicants request that these amendments be entered prior to initial examination and further request that prosecution on the merits proceed thereafter. Should the Examiner have any questions, please contact the undersigned.

No fees beyond the fee for four new dependent claims are believed due. However, please charge any additional fees or credit any overpayment to Deposit Account No. 50-3025.

Respectfully submitted,

Date: December 28, 2004

  
Jeramie J. Keys  
Reg. No. 42,724

Withers & Keys, LLC  
P.O. Box 71355  
Marietta, Ga 30007-1355  
(404) 849.2093